

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: S.C.M. Lin

Serial No.: 10/092,685

For: Electrical Contact
Arrangement for
Hearing Instruments

Filed: March 7, 2002

Art Unit: 2646

Examiner: Phylesha L. Dabney

Att'y Dkt.: 2002 P 3667 US 02

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/Joel Miller/ March 6, 2008
Signature Date of Signature

Joel Miller 29,955
Attorney Name Reg. No.

Brief on Appeal

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Via EFS-Web

Sir:

This brief is submitted in support of the December 13, 2007 notice
of appeal of the rejection of the claims and further in response to the
February 6, 2008 Notice of Panel Decision from Pre-Appeal Brief Review.

(i) Real Party in Interest

Siemens Hearing Instruments, Inc., Piscataway, NJ.

(ii) Related Appeals and Interferences

None.

(iii) Status of Claims

Claims 1-18 are pending in this application.

Claims 1-12 stand rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 6,678,386 (Robinson et al.).

Claims 13-18 are objected to on the ground that they depend from a rejected claim, as these claims contain allowable subject matter.

The rejection of claims 1-12 is appealed.

(iv) Status of Amendments

No amendments have been submitted subsequent to the 11/01/07 rejection from which this appeal has been taken.

(v) Summary of the Claimed Subject Matter

The wiring and the space requirements for an electrical programming contact assembly 30 of a hearing instrument faceplate 10 may be greatly reduced by conforming the contacts 40, 50, and 60 of the assembly 30 to the contour of the instrument's battery door 24 and providing each contact 40, 50, and 60 with an interconnected terminal 44, 54, and 64, respectively. This configuration is further enhanced by embedding portions of the programming contacts 40, 50, and 60 directly in the faceplate 10 during fabrication. A discussion of each of the three independent claims (claims 1, 5, and 9) follows.

Claim 1

The basis for the subject matter set forth in independent claim 1, comprising the faceplate 10, the battery door 24, and the electrical programming contact assembly 30 partially affixed to the faceplate 10 and generally adjacent and conforming to the contour of the battery door 24, is found generally within the entire application and, in particular, in the specification on page 2, lines 7-12; and page 3, lines 3-15; and Figure 1 (10, 24, 30, 42, 52, 62) and Figures 3-5 (42, 52, 62, respectively). Support for the electrical programming contact assembly 30 being partially embedded in the faceplate 10 is found in the specification on page 2, line 18, through page 3, line 2; page 3, lines 18, through page 4, line 2; and page 4, lines 8-11; and Figure 1 (10, 24, 30, 40, 42, 44, 50, 52, 54, 60, 62, and 64) and Figures 3-5 (40, 42, 44, and 46; 50, 52, 54, and 56; 60, 62, 64, and 66; respectively).

Claim 5

The basis for the subject matter set forth in independent claim 5, comprising the faceplate 10, the battery door 24, and the electrical programming contact assembly 30 partially affixed to the faceplate 10 and generally adjacent and conforming to the contour of the battery door 24, is found generally within the entire application and, in particular, in the specification on page 2, lines 7-12; and page 3, lines 3-15; and Figure 1 (10, 24, 30, 42, 52, 62) and Figures 3-5 (42, 52, 62, respectively). Support for

the electrical programming contact assembly 30 being partially embedded in the faceplate 10 is found in the specification on page 2, line 18, through page 3, line 2; page 3, lines 18, through page 4, line 2; and page 4, lines 8-11; and Figure 1 (10, 24, 30, 40, 42, 44, 50, 52, 54, 60, 62, and 64) and Figures 3-5 (40, 42, 44, and 46; 50, 52, 54, and 56; 60, 62, 64, and 66; respectively).

Claim 9

The basis for the subject matter set forth in independent claim 9, comprising the faceplate 10, the battery door 24, and the electrical programming contacts 40, 50, and 60 partially affixed to the faceplate 10 and generally adjacent and conforming to the contour of the battery door 24, is found generally within the entire application and, in particular, in the specification on page 2, lines 7-12; and page 3, lines 3-15; and Figure 1 (10, 24, 30, 40, 42, 50, 52, 60, 62) and Figures 3-5 (40, 42; 50, 52; 60, 62; respectively). Support for the electrical programming contacts 40, 50, and 60 being partially embedded in the faceplate 10 is found in the specification on page 2, line 18, through page 3, line 2; page 3, lines 18, through page 4, line 2; and page 4, lines 8-11; and Figure 1 (10, 24, 30, 40, 42, 44, 50, 52, 54, 60, 62, and 64) and Figures 3-5 (40, 42, 44, and 46; 50, 52, 54, and 56; 60, 62, 64, and 66; respectively).

(vi) Grounds of rejection to be reviewed on appeal

Anticipation of claims 1-12 by U.S. Patent No. 6,678,386

(Robinson et al.).

(vii) Argument

Robinson et al. Does Not Anticipate the Claims
as it Does Not Teach All of the Claimed Elements

To sustain a rejection based on anticipation under 35 U.S.C. § 102, “the reference must teach every element of the claim.” M.P.E.P. § 2131 (8th ed., rev. 6, September 2007), page 2100-67. The M.P.E.P. goes on to state that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Id.

The applicant submits that this standard has not been met, as there is no disclosure, teaching, or suggestion of:

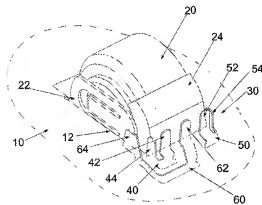
an “electrical programming contact assembly partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door, where the electrical programming contact assembly is partially embedded in the faceplate” (claims 1 and 5);

or

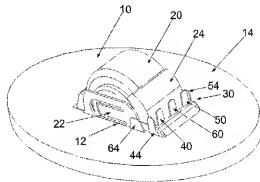
an “electrical programming contact ... partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door; where the contact is partially embedded in the faceplate” (claim 9).

The Applicant's Device

In the applicants' device, "the programming contact assembly 30 is adjacent to the battery door 24 and is arranged to generally conform to the door 24." Specification, page 2, lines 10-12; Figures 1 and 2:



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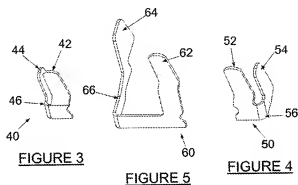


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The specification further states that "[t]he battery 20, the battery support contacts 22, and the battery door 24 protrude vertically away from the [inside] surface 14 of the faceplate 10." Specification, page 2, lines 12-14; Figures 1 and 2.

The specification also provides that "the contact portions 42, 52, and 62 extend generally vertically from the inner surface 14 of faceplate 10, although tilting or curving somewhat towards the battery door 24." Specification, page 3, lines 11-13; Figures 1 and 2. The curved aspect of the individual

contacts 40, 50, and 60 is further visible from Figures 3-5 (note the curved contact portions 42, 52, and 62, respectively):



During fabrication, the contacts 40, 50, and 60 are embedded directly within the faceplate proper, as discussed in the applicant's specification. Specification, page 2, line 18, through page 3, line 2 ("[t]he faceplate 10 can be fabricated by injection molding, during which the battery support contacts 22 and the programming contact assembly 30 are held in place"); page 4, lines 8-11 ("[t]he material used to fabricate the contacts 40, 50, and 60 must be flexible enough to allows the contact portions 42, 52, and 62 to flex but not so soft that they will not maintain there general shape during the injection molding process"). Referring to Figure 1 (on the preceding page), the contacts 40, 50, and 60 are embedded within the faceplate 10.

The applicant's specification further provides that "at least a portion of each of the interconnection portions 46, 56, and 66, and possibly portions of

the contact portions 42, 52, and [62], and the terminal portions 44, 54, and 64 are embedded within the faceplate 10.” Specification, page 3, line 18, through page 4, line 2; Figures 1, 3, 4, and 5.

Robinson et al.

In contrast to the applicant’s embedded electrical programming contacts 40, 50, and 60, Robinson et al. employs a vertically-oriented, “discrete programming module” 300, a separate, detachable element that slides into a rectangular slot 220 in the faceplate 10. Robinson et al., column 3, lines 7-16; and column 4, lines 53-65; as illustrated in Figures 2 and 3:

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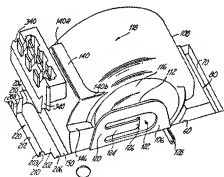


FIG. 2

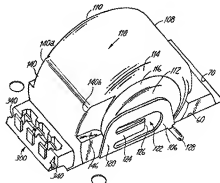


FIG. 3

The programming module 300 contains electrical leads 320 (visible in Figures 2 and 3 but without reference numerals). As shown in Figure 4 below (inverted relative to Figures 2 and 3), the electrical leads 320 are

nearly-vertical and include a hump 326 which serves as the contact portion of the lead. Robinson et al., column 5, lines 59-62.

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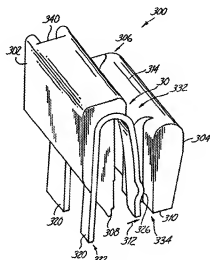


FIG. 4

Finally, the battery door 101 in Robinson et al. is positioned on the outside surface of the faceplate 10, as illustrated in Figure 1:

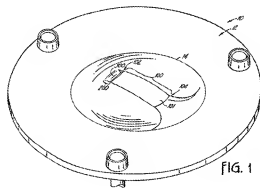


FIG. 1

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It attaches to the faceplate 10 by a snap or friction fit. Robinson et al., column 2, lines 53-62.

Claims 1 and 5

Robinson et al. lacks an “electrical programming contact assembly partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door.” Claims 1 and 5. Due to the manner of attachment, the battery door 101 in Robinson et al. remains on the outside surface of the faceplate 10, and is generally coplanar with the surface of the faceplate 10 (see Figure 1), while the electrical leads 320 are contained in a detachable, discrete module 300 positioned in a slot 220 in the faceplate 10, in an orientation perpendicular to and beneath the surface of the faceplate 10. Thus, the electrical leads 320 of Robinson et al. cannot be adjacent nor can they conform to the contour of the battery door 101.

Robinson et al. also does not have an “electrical programming contact assembly [] partially embedded in the faceplate.” Claims 1 and 5. Because the electrical leads 320 of Robinson et al. are situated in a detachable, discrete module 300, they are not embedded in the faceplate 10 in the same fashion as the applicant’s contacts 40, 50, and 60.

Claims 3, 7, and 11

Robinson et al. lacks an electrical contact having an “interconnecting portion [] at least partially embedded in the faceplate.” Claims 3, 7, and 11. The electrical leads 320 in Robinson et al. are not embedded in the material of the faceplate 10 as are the applicant’s interconnection portions 46, 56, and 66.

Claim 9

Robinson et al. lacks an electrical programming contact “partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door.” Claim 9. As noted above (and discussed in connection with claims 1 and 5), the battery door 101 in Robinson et al. remains on the outside surface of the faceplate 10, and is generally coplanar with the surface of the faceplate 10 (see Figure 1), while the electrical leads 320 are contained in a detachable, discrete module 300 positioned in a slot 220 in the faceplate 10, in an orientation perpendicular to and beneath the surface of the faceplate 10. Therefore, the electrical leads 320 are neither adjacent nor can they conform to the contour of the battery door 101.

Robinson et al. also does not have an electrical programming contact “partially embedded in the faceplate.” Claim 9. Because the electrical leads 320 of Robinson et al. are situated in a detachable, discrete module 300, they are not embedded in the faceplate 10 in the same fashion as the applicant’s contacts 40, 50, and 60.

Conclusion

For at least the foregoing reasons, Robinson et al. does not disclose, teach, or suggest the applicant’s claimed invention and, therefore, the claims are not anticipated by the reference. The applicant respectfully requests that

the Board reverse the examiner and direct that the application be passed to allowance.

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Respectfully submitted,

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(viii) Claims Appendix

1. A modular assembly for a hearing instrument, comprising:
a faceplate;
a battery door in the faceplate; and
an electrical programming contact assembly partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door, where the electrical programming contact assembly is partially embedded in the faceplate.
2. An assembly as set forth in claim 1, where
the faceplate comprises a generally rectangular opening; and
the battery door resides within the generally rectangular opening.
3. An assembly as set forth in claim 1, where the electrical programming contact assembly comprises at least one contact, where each contact comprises a contact portion and a terminal portion generally adjacent and conforming to the contour of the battery door, and an interconnection portion, interconnecting the contact and terminal portions, where the interconnecting portion is at least partially embedded in the faceplate.

4. An assembly as set forth in claim 3, where the faceplate comprises a generally rectangular opening; and the battery door resides within the generally rectangular opening.

5. An electrical programming contact assembly for a faceplate of a hearing instrument, where the faceplate comprises a battery door and the assembly is partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door, where the electrical programming contact assembly is partially embedded in the faceplate.

6. An assembly as set forth in claim 5, where the faceplate comprises a generally rectangular opening; and the battery door resides within the generally rectangular opening.

7. An assembly as set forth in claim 5, where the electrical programming contact assembly comprises at least one contact, where each contact comprises a contact portion and a terminal portion generally adjacent and conforming to the contour of the battery door, and an interconnection portion, interconnecting the contact and terminal portions, where the interconnecting portion is at least partially embedded in the faceplate.

8. An assembly as set forth in claim 7, where the faceplate comprises a generally rectangular opening; and the battery door resides within the generally rectangular opening.

9. An electrical programming contact for a faceplate of a hearing instrument, where the faceplate comprises a battery door and the contact is partially affixed to the faceplate and generally adjacent and conforming to the contour of the battery door; where the contact is partially embedded in the faceplate.

10. An electrical programming contact as set forth in claim 9, where the faceplate comprises a generally rectangular opening; and the battery door resides within the generally rectangular opening.

11. An electrical programming contact as set forth in claim 9, where the electrical programming contact comprises a contact portion and a terminal portion generally adjacent and conforming to the contour of the battery door, and an interconnection portion, interconnecting the contact and terminal portions, where the interconnecting portion is at least partially embedded in the faceplate.

12. An electrical programming contact as set forth in claim 11, where the faceplate comprises a generally rectangular opening; and the battery door resides within the generally rectangular opening.

(ix) Evidence Appendix

None.

(x) Related Proceedings Appendix

None.